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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,443	03/30/2004	Vishal Sarin	2102397-992980	5465
26379	7590	04/21/2006	EXAMINER	
DLA PIPER RUDNICK GRAY CARY US, LLP			LUU, PHO M	
2000 UNIVERSITY AVENUE			ART UNIT	
E. PALO ALTO, CA 94303-2248			PAPER NUMBER	
			2824	

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/814,443	Applicant(s) SARIN ET AL.	
	Examiner Pho M. Luu	Art Unit 2824	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-10 is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input checked="" type="checkbox"/> Other: <u>Updated Search History</u> . |

DETAILED ACTION

1. Acknowledgment is made of applicant's Amendment, filed 27 January 2006. The changes and remarks disclosed therein were considered.
2. Claims 1-10 are pending in the application.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Bill et al. (US. 6,046,932).

Regarding claim 1, Bill et al in figure 1 discloses a method for programming a memory cell comprising:

applying an incremental current ($\Delta V = R_{\text{Bitline}} \times I_{\text{Bitline}}$) to selected memory cells (202, 210) during programming of the selected memory cells (input voltage Program/APDE coupled to word line WL0 through Logic 218, $\Delta V = R_{\text{Bitline}} \times I_{\text{Bitline}}$ and the bitline 216 selected for selected memory cell 202 during a program, see column 6, lines 30-33 and lines 49-58), the incremental current being substantially equal to leakage current from the selected memory cells (also, see column 6, lines 30 ⁺ through ~~column 4, lines 4~~).

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4/17/06

Allowance

5. Claims 2-10 is allowed.

The following is an examiner's statement of reasons for allowance:

There is no teaching or suggestion in the prior art to provide:

“detecting a leakage current on the bitline of the second memory array and applying an incremental current to the bitlines of the first memory array substantially equal to the detected current during programming of the first memory array” as claimed in the independent claim 2; or

“a second circuit coupled to the bitline of the second memory array to measure current on the bitline and a current source coupled to the bitline of the first memory array to provide a current thereto in response to the detected current on the bitline of the second memory array” as claimed in the independent claim 3. Claims 4-9 are also allowed because of their dependency on claim 3; or

“a current source having an output for providing a first current in a first mode and having a second output to provide a second current to a bitline of the first memory array in a second mode” as claimed in the independent claim 10.

Conclusion


6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Pho M. Luu whose telephone number is 571.272.1876. The examiners can normally be reached on M-F 8:00AM – 5:00PM.

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If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Richard Elms, can be reached on 571.272.1869. The official fax number for the organization where this application or proceeding is assigned is 703.872.9306 for all official communications.

The information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PML
12 April 2006

A handwritten signature in black ink, appearing to read 'Richard Elms', is positioned above the printed name.

RICHARD ELMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800